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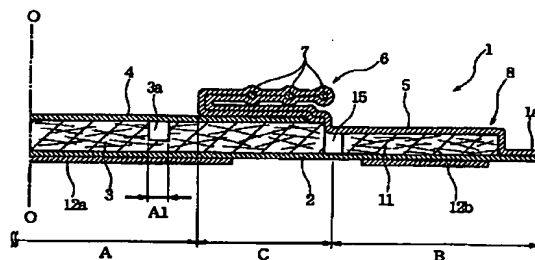
(54) 【発明の名称】 生理用ナプキン

(57) 【要約】

【課題】 就寝中の寝返りなどが起こると、生理用ナプキンの後方のフラップ部の端部が、身体と中央の吸収性本体との間に折れ重なる状態で巻き込まれやすく、液の吸収能力が低下し、且つ着用者に不快な異物感を与える。

【解決手段】 生理用ナプキンの後方部では、主吸収領域Aの高剛性部A1を含む領域と、側部領域Bと、防漏側壁6が重ねられている境界領域Cとで、剛軟度が、主吸収領域A>境界領域C>側部領域Bとなっている。よって主吸収領域Aが捩れにくく、フラップが形成された側部領域Bは、境界領域Cが存在しているために主吸収領域Aと重なるように変形しづらい。

図3



## 【特許請求の範囲】

【請求項 1】 縦方向に延びる主吸収領域と、前記主吸収領域の両側部に位置する側部領域と、前記主吸収領域と前記側部領域との間の境界領域で縦方向に延びる防漏側壁とが設けられ、前記主吸収領域では、液不透過性の裏面シートと液透過性の表面シートとの間に縦方向に延びる主吸収体が設けられている生理用ナプキンにおいて、

縦方向の後方部では、前記主吸収領域の少なくとも一部に高剛性部が形成され、前記後方部では、前記側部領域が左右両側へ膨んだ後部フラップが形成され、この後部フラップでは前記裏面シートと表面側に位置するシートとの間に副吸収体が介在しており、

前記後方部では、主吸収領域の前記高剛性部が形成された領域、前記境界領域、前記後部フラップのそれぞれの 10 mm 幅における、縦方向の剛軟度が、主吸収領域 > 境界領域 > 後部フラップであることを特徴とする生理用ナプキン。

【請求項 2】 前記主吸収領域の剛軟度が 9.8 ~ 29.4 mN、境界領域の剛軟度が 3.94 ~ 8.8 mN、後部フラップの剛軟度が 0.49 ~ 3.43 mN である請求項 1 記載の生理用ナプキン。

【請求項 3】 前記後方部で、前記主吸収体の少なくとも一部が圧縮されて前記高剛性部が形成されている請求項 1 または 2 記載の生理用ナプキン。

【請求項 4】 前記後方部において、前記主吸収体が一部で圧縮されて縦方向に線状に延びる前記高剛性部が形成されており、前記剛軟度は前記縦方向に延びる前記高剛性部を含む幅 10 mm の領域で測定されるものである請求項 3 記載の生理用ナプキン。

【請求項 5】 前記防漏側壁は、前記後方部において折り畳まれ、前記後方部よりも前方において受液側から立ち上がり可能とされている請求項 1 ないし 4 のいずれかに記載の生理用ナプキン。

【請求項 6】 前記境界領域と、前記後部フラップとの境界部には、折り癖部が設けられている請求項 1 ないし 5 のいずれかに記載の生理用ナプキン。

【請求項 7】 前記折り癖部では、前記主吸収体と前記副吸収体とが分離されている請求項 6 記載の生理用ナプキン。

【請求項 8】 前記副吸収体が複数に分離されている請求項 1 ないし 7 のいずれかに記載の生理用ナプキン。

## 【発明の詳細な説明】

## 【0001】

【発明の属する技術分野】本発明は、生理用ナプキンに係わり、特に後方部における液漏れと、後方部の身体へのフィット性を高めた生理用ナプキンに関する。

## 【0002】

【従来の技術】例えば特開 2000-189459 号公報に記載された生理用ナプキンは、縦方向の後部に、吸

収性本体の両側部において側方へ膨らんだ形状のフラップ部が設けられ、幅方向の中央部に吸収体が形成されているとともに、前記フラップ部に前記吸収体とは別の吸収体が設けられている。この生理用ナプキンでは、吸収性本体の後方部特に身体の尻部に滲出した経血を前記フラップ部で吸収でき、その結果、後方部での液の横漏れが防止できるようになっている。

## 【0003】

【発明が解決しようとする課題】しかし、上記公報に記載された生理用ナプキンは、後方部において中央部分の吸収体とフラップ部に設けられた吸収体との境界部が容易に変形しやすい構造であるため、着用中、特に就寝中の寝返りなどにより、生理用ナプキンの後方部に擦れ力等が作用すると、まず中央部分の吸収体に変形しやすく、さらにフラップ部が中央側へスライドまたは中央側に折り返って、フラップ部が中央部分に重なるように変形するおそれがある。

【0004】前記フラップ部が中央部分の受液側に重なると、後方部での経血の吸収が阻害されて横漏れが生じやすくなり、さらに生理用ナプキンのフィット感が失われ、着用者の尻部に違和感を与えることになる。

【0005】本発明は上記従来の課題を解決するためのものであり、着用中、特に就寝中における後方のフラップ部が中央部側へ変形するのを防止して、フィット感を損なわず、後方部での横漏れを有効に防止できる生理用ナプキンを提供することを目的としている。

## 【0006】

【課題を解決するための手段】本発明は、縦方向に延びる主吸収領域と、前記主吸収領域の両側部に位置する側部領域と、前記主吸収領域と前記側部領域との間の境界領域で縦方向に延びる防漏側壁とが設けられ、前記主吸収領域では、液不透過性の裏面シートと液透過性の表面シートとの間に縦方向に延びる主吸収体が設けられている生理用ナプキンにおいて、縦方向の後方部では、前記主吸収領域の少なくとも一部に高剛性部が形成され、前記後方部では、前記側部領域が左右両側へ膨んだ後部フラップが形成され、この後部フラップでは前記裏面シートと表面側に位置するシートとの間に副吸収体が介在しており、前記後方部では、主吸収領域の前記高剛性部が形成された領域、前記境界領域、前記後部フラップのそれぞれの 10 mm 幅における、縦方向の剛軟度が、主吸収領域 > 境界領域 > 後部フラップであることを特徴とするものである。

【0007】例えば、前記主吸収領域の剛軟度が 9.8 ~ 29.4 mN、境界領域の剛軟度が 3.94 ~ 8.8 mN、後部フラップの剛軟度が 0.49 ~ 3.43 mN である。すなわち、主吸収領域、境界領域、後部フラップの、剛軟度の比が、9.8 ~ 29.4 : 3.94 ~ 8.8 : 0.49 ~ 3.43 として表すことができる。

【0008】また、例えば、前記後方部で、前記主吸収

体の少なくとも一部が圧縮されて前記高剛性部が形成されているものであり、あるいは、前記後方部において、前記主吸収体が一部で圧縮されて縦方向に線状に延びる前記高剛性部が形成されており、前記剛軟度は前記縦方向に延びる前記高剛性部を含む幅 10 mm の領域で測定されるものである。あるいは、前記主吸収体が予め厚く形成された後に主吸収体のほぼ全域が圧縮されて、後方部での主吸収体が、それよりも前方に位置する主吸収体よりも剛軟度が高くなって、後方部の主吸収領域のほぼ全域が前記高剛性部とされていてもよい。

【0009】また、前記防漏側壁は、前記後方部において折り畳まれ、前記後方部よりも前方において受液側から立ち上がり可能とされ、前記後方部の境界領域では、防漏側壁が折り畳まれた部分の 10 mm 幅、または折り畳まれた防漏側壁を含む 10 mm 幅の部分の剛軟度が前記のように規定される。

【0010】また、前記境界領域と、後部フラップとの境界部には、折り癖部が設けられていることが好ましい。

【0011】さらに、前記折り癖部では、前記主吸収体と前記副吸収体とが分離されているものとしてでき、さらに、前記副吸収体が複数に分離されているものであってもよい。

【0012】本発明の生理用ナプキンでは、後部フラップが形成された後方部において、中央部の主吸収領域に高剛性部が設けられているため、生理用ナプキンの握り力が作用したときに主吸収領域が変形しにくい。また主吸収領域と後部フラップとの境界領域は、防漏側壁が設けられた嵩高な構造となり且つ後部フラップよりも剛軟度が高くなっている。よって、握り力などが作用したときに、後部フラップが主吸収領域へ重なるように折れたりスライドする変形が生じにくくなる。また後部フラップは変形しやすく装着者の尻部にフィットしやすい。

【0013】

【発明の実施の形態】以下、本発明について図面を参照して説明する。

【0014】図 1 は本発明の生理用ナプキンの実施の形態を示す平面図、図 2 は図 1 の II-II 線における半断面図、図 3 は図 1 の III-III 線における半断面図、図 4 は他の実施の形態での図 3 に相当する半断面図、図 5 は図 1 の実施の形態における主吸収体と副吸収体の形状を示す透視平面図、図 6 は他の実施の形態を示す図 5 に相当する透視平面図である。なお、前記図 2、図 3、図 4 は縦方向に延びる中心線 O-O の片側半分の断面図であり、他方の半分は前記各図と対称構造である。

【0015】図 1 ないし図 3 に示す生理用ナプキン 1 は、縦方向（Y 方向）に延びる中心線 O-O を介して左右対称形状である。幅方向の中央部分は、縦方向に延びる所定幅の主吸収領域 A、左右両側部は側部領域 B、

B、前記主吸収領域 A と前記側部領域 B、B との境界部

分が境界領域 C、C である。そして、前記主吸収領域 A のうちの剛軟度が高められている部分が高剛性部 A1、A1 である。

【0016】また縦方向では、所定の長さ L1 の範囲（後に説明する後部フラップおよび前記高剛性部 A1 が形成されている長さ範囲）が後方部、前記後方部 L1 よりも前方の残り部分（長さ L2）が前方部である。前記長さ L2 の前方部において、L3 の長さの範囲が、後に説明する防漏側壁が立ち上がり可能とされた防漏領域である。なお、前記防漏領域（L3 の部分）が前記後方部（L1 の部分）の途中まで延び、または後方部（L1 の部分）のほぼ全長に渡るまで延びていてもよい。

【0017】図 2 と図 3 に示すように、生理用ナプキンの裏面の全域に液不透過性シートからなる裏面シート 2 が設けられている。前記裏面シート 2 上には主吸収体 3 が設けられている。図 5 に示すように、前記主吸収体 3 は、前記主吸収領域 A とその両側部の境界領域 C、C を合わせた幅寸法にはほぼ一致しており、且つ縦方向のほぼ全域に渡って設けられている。

【0018】受液側となる表面側では、前記主吸収体 3 を覆う液透過性の表面シート 4 が設けられている。この表面シート 4 は、前記主吸収領域 A とその両側部の境界領域 C、C を合わせた幅寸法にはほぼ一致する幅寸法を有しており、縦方向の全長に渡って設けられている。

【0019】前記側部領域 B では、受液側の表面に液不透過性または疎水性のシート 5 が設けられている。このシート 5 は、前記主吸収体 3 の左右両側部の前記境界領域 C、C において、2 枚重ねに折り畳まれて、防漏側壁 6、6 が形成されている。前記防漏側壁 6、6 では、前記シート 5 の折り畳み内部に複数本（図では 3 本）の弾性部材 7 が挟まれて接着されており、この弾性部材 7 は前記防漏側壁 6、6 において縦方向のほぼ全長に設けられている。

【0020】図 3 に示すように、前記後方部（L1 の部分）では、前記防漏側壁 6、6 が平坦状に折り畳まれた状態で表面シート 4 の表面に接着され、または熱融着されており、同様に、前方部（L2 の部分）における前記防漏領域（L3 の部分）よりも前方の部分で、前記防漏側壁 6、6 が同様に折り畳まれて表面シート 4 の表面に接着され、または熱融着されている。また前記防漏領域（L3 の部分）では、前記防漏側壁 6、6 が自由状態である。

【0021】外力が与えられていない自由状態の生理用ナプキン 1 は、前記弾性部材 7 の弾性収縮力によって、受液側が凹状になるように湾曲し、その結果、前記防漏領域（L3 の部分）では、防漏側壁 6、6 が図 2 に示すように立ち上がる。そして防漏領域（L3 の部分）では、防漏側壁 6、6 が、受液側へ立ち上がる側壁部 6a と、前記側壁部 6a の上部から自由端（折り返し端）6c が外側へ向くように変形した肌当接部 6b と、が形成

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されている。

【0022】図2に示すように、生理用ナブキン1の左右両縁部1a、1aで、前記裏面シート2と前記シート5とが接合されている。また図1と図5に示す縦方向の前縁部1bでは、前記裏面シート2と前記表面シート4とが接合され、後縁部1cでも、前記裏面シート2と前記表面シート4とが接合されている。前記接合は、ホットメルト型接着剤による接着、または熱融着（熱シール）などで行われる。

【0023】図1と図5に示すように、生理用ナブキン1の後方部（L1の部分）では、前記側部領域B、Bがそれよりも前方の部分に比べて左右両側に広がって、その縁部が曲線を描く形状となった後部フラップ8、8が形成されている。また前記前方部（L2の部分）では、前記側部領域B、Bが、左右両側部へ突出してウイング9、9が形成されている。この生理用ナブキン1は、前記ウイング9、9が下着のクロッチ部を挟むように裏側に折り返されて使用される。また前記後部フラップ8、8は装着者の尻部に当てられる。

【0024】図3および図5に示すように、前記後部フラップ8、8では、前記裏面シート2と表面側に位置するシート5との間に副吸収体11が挟まれている。また、図2と図5に示すように、前記ウイング9、9では、前記裏面シート2と前記シート5とが接合されている。

【0025】前記生理用ナブキン1では、裏面シート2の外面に、下着に粘着させるための粘着層が設けられている。図2と図3に示すように、前記裏面シート2の外面では、主吸収領域Aのほぼ裏面側において粘着層12aが設けられ、前記後部フラップ8、8に粘着層12b、12bが、前記ウイング9、9に粘着層12c、12cが設けられている。

【0026】この生理用ナブキン1を装着する際には、前記粘着層12aが、下着のクロッチ部に粘着され、前記粘着層12b、12bが下着の尻当て部側に粘着させられる。そして前記ウイング9、9は下着のクロッチ部の両側部を巻き込むように折り返され、粘着層12c、12cが下着のクロッチ部の外面に粘着される。

【0027】前記主吸収体3は、エアレイドバルブ、薄葉紙、ポリマーシート、綿状バルブ又は天然セルロース繊維の積層物等の親水性材料又は混合物で形成されており、その幅方向の寸法は50～100mm程度である。例えば、綿状バルブを坪量200～500g/m<sup>2</sup>の範囲で積層し、薄葉紙で被覆した後、密度が50～120mg/cm<sup>3</sup>となるようにプレス成形したものである。また前記繊維積層物に高分子吸収材（SAP）を5～40質量%混合し、前記高分子吸収材の吸収力で主吸収体3内での液体の流動を阻止できるようにしたのもであってもよい。

【0028】図1と図5に示すように、前記主吸収体3

では、後方部L1すなわち後部フラップ8、8が設けられている領域において、縦方向に線状に延びる圧縮部（または圧搾部）3a、3aが設けられ、この圧縮部3a、3aの部分およびその周囲部分が高剛性部A1、A1となっている。この線状の圧縮部3a、3aは、前記中心線O-Oを挟んで左右対称位置に1本ずつ（あるいは複数本ずつでも可）形成されており、両圧縮部3a、3aは互いに平行である。

【0029】圧縮部3aは主吸収領域Aに設けられ、圧縮部3aの幅寸法は2～5mmである。なお、前記主吸収領域Aの幅寸法は20～60mmである。

【0030】前記副吸収体11は、前記主吸収体3と同じ材料で形成される。この場合、副吸収体11の目付けと主吸収体3の目付けが同じであってもよいが、副吸収体11の目付けが主吸収体3の目付けよりも小さいことが好ましい。例えば主吸収体3と副吸収体11が共に親水性の繊維積層物で形成され、前記境界領域Cと側部領域Bとの境界線上で、主吸収体3と副吸収体11とが分離して、両吸収体3と11が同じティッシュペーパーで包まれているものである。その結果、境界領域Cと側部領域Bとの境界線上には、吸収体が存在していない折り癖部15、15が形成されている。

【0031】また、副吸収体11が主吸収体3と異なる材質であり、例えば副吸収体11がスルーエアー方式で形成されたクッション性に富む不織布、親水性フォーム樹脂シート、親水処理されたフォームシートなどで形成されてもよい。

【0032】前記表面シート4は、疎水性繊維の不織布、疎水性繊維と親水性繊維で形成された不織布、疎水性繊維で形成された開孔不織布、開孔フィルムなどで形成されている。また前記表面シート4は身体へのフィット性を高めるため、嵩高に成形されていてもよく、この場合の嵩高寸法は1～15mm程度が好ましい。

【0033】前記裏面シート2は、通気性の樹脂フィルム、疎水性繊維で形成された不織布、前記不織布とフィルムとのラミネート材などで形成されている。

【0034】防漏側壁6、6を形成するシート5は、疎水性合成繊維で構成された不織布、発泡シート、開孔フィルム、開孔不織布などを用いることができる。またその他の材料としては、疎水性合成繊維に親水処理を施しシート化した不織布、疎水性合成繊維とビスコースレーヨン、アセテートレーヨン、天然セルロース繊維等の親水性繊維混合物が挙げられる。あるいは前記材料で構成した防漏側壁6、6の内部に高分子吸収体をティッシュペーパーで被覆したSAPシート、エアレイドバルブ、親水性メルトブロン不織布、バルブシート、レーヨンスパンレース不織布等の吸収性材料を配置させ、防漏側壁6、6に接触した液体を吸収保持できるようにしてもよい。

【0035】前記弾性部材7は、熱可塑性合成ゴムを主

成分としたフィルム状、糸状、ネット状物、若しくは天然ゴムを主成分とした板状、糸状物より選択することができ、自然長から1.1～2.0倍の範囲内で引き延ばした状態で0.49～1.47Nの範囲内の力を与えた状態で防漏側壁6、6に接着固定されたものが好ましい。

【0036】なお防漏側壁6、6の立ち上がり寸法は、側壁部6aの高さが5～50mm、肌当て部6bの幅寸法が5～30mmである。

【0037】図3に示すように、後部フラップ8、8が形成された後方部(L1の部分)では、境界領域Cにおいて防漏側壁6が折り畳まれて積層されている(なお、後方部(L1の部分)の少なくとも一部において防漏側壁6が図2に示すように立ち上がっていてもよい)。よって前記境界領域Cでは断面形状が高高となっている。

【0038】そして、前記後方部(L1の部分)では、主吸収領域Aでの高剛性部A1すなわち圧縮部3aが設けられている領域、後部フラップ8が形成された側部領域B、防漏側壁6が設けられた境界領域Cで剛軟度が相違しており、剛軟度が、高剛性部A1が設けられた領域

【0039】ここで、前記剛軟度は、横方向(X方向)の幅寸法が10mmで縦方向に延びるように切断された試料を測定したものであり、前記主吸収領域Aでは圧縮部3aを含む10mm幅の試料(圧縮部3aが多数本形成されている場合には10mm幅に複数の圧縮部3aが存在することも有り得る)、前記境界領域Cでは前記防漏側壁6を含む10mm幅の試料である。

【0040】前記剛軟度は、前記試料を、ガーレ柔軟度試験機(株式会社安田精機製作所製:製品番号311)を用い、JIS L 1096 8.20.1(1999年) A法(ガーレ法)に基づいて測定したものである。この剛軟度は、高剛性部A1が設けられている主吸収領域Aで9.8～29.4mN、境界領域Cで3.94～8.8mN、後部フラップが形成された側部領域Bで0.49～3.43mNの範囲が好ましい。

【0041】この生理用ナプキンでは、後方部(L1の部分)において、両側方へ膨らむ形状の後部フラップ8、8が形成されており、この部分が装着者の尻部に当てられて、就寝時などにおいて尻部からの経血の横漏れを防止できるようにしている。

【0042】前記後方部(L1の部分)では、主吸収領域Aに高剛性部A1が設けられているため、主吸収領域Aが折れたり振れることが少なく、主吸収領域Aが肌から離れたりずれるのを防止できる。

【0043】前記主吸収領域Aの側方には、防漏側壁6を有して高高となり、しかも後部フラップ8よりも剛軟度の高い境界領域Cが位置しているが、この境界領域Cは高高であるため肌へのクッション性が高く肌への当りが柔らかい。しかも、境界領域Cは適度な剛軟度を有し

ているため、主吸収領域Aと重なるように振れまたはスライドしあるいは折り込まれることが少ない。

【0044】また後部フラップ8、8には副吸収体11が位置しているため、後部フラップ8に流れた経血を吸収することができ、生理用ナプキン1の横漏れを有効に防止できる。さらに、後部フラップ8は剛軟度が低いために尻部の形に追従してフィットし、また折り癖部15を有するため、尻部の側方への湾曲に追従してフィットしやすい。

【0045】比較的剛軟度の低い後部フラップ8と主吸収領域Aとの間には、前記のように後部フラップ8よりも剛軟度の高い境界領域Cが存在しているため、後部フラップ8が振じれたり変形したとしても、主吸収領域Aと重なる状態に変形しづらくなる。よって折れや振れによって後部フラップ8と主吸収領域Aとが重なることがなく、主吸収領域Aの吸収能力が低下したり、肌への違和感を生じさせることが少ない。

【0046】図4に示す他の実施の形態では、後方部(L1の部分)において、主吸収体3と副吸収体11とが繋がっており、境界領域Cと後部フラップ8との境界線上において、前記主吸収体3と副吸収体11との境界部で吸収体が圧縮されて、または厚みが減少させられて折り癖部16が形成されている。さらに後部フラップ8の外周縁に沿うように副吸収体11の縁部に圧縮部17が形成されている。

【0047】経血が後部フラップ8に至り副吸収体11に吸収され、その経血が副吸収体11内または表面を側方へ移動したときに、密度が高くなっている前記圧縮部17に経血が引き付けられて圧縮部17で保持される。よって経血が後部フラップ8からさらに側方へ洩れにくくなる。

【0048】次に、図6に示すさらに他の実施の形態では、前記後部フラップ8、8に設けられた副吸収体11が分離線で分離され、または圧縮されて折り癖部18が形成されている。この折り癖部18により副吸収体11が縦方向に分割されている。この実施の形態では、副吸収体11が縦方向に向けて湾曲しやすくなり、装着者の尻部の形状にさらに追従して変形しやすくなる。

【0049】なお、後方部(L1の部分)での主吸収領域Aにおいて、主吸収体3の全域が、前方部(L2の部分)よりも剛軟度が高くなるように圧縮させられるなどして主吸収領域Aのほぼ全域が高剛性部A1となってもよい。

【0050】

【発明の効果】以上詳述した本発明によれば、生理用ナプキンの着用中、特に就寝中における後部フラップの巻き込みを防止でき、主吸収領域の吸収機能が損なわれたり、または、フィット感を損なうことがない。また後部フラップが液吸収機能を有するため、液の横漏れを有効に防止できる。

## 【図面の簡単な説明】

【図1】本発明の生理用ナプキンの実施の形態を示す平面図、

【図2】図1のII-II線における半断面図、

【図3】図1のIII-III線における半断面図、

【図4】本発明の他の実施の形態の生理用ナプキンを示す図3に相当する半断面図、

【図5】図1に示す生理用ナプキンの主吸収体および副吸収体の形状を示す透視平面図、

【図6】本発明の他の実施の形態の生理用ナプキンを示す図5に相当する透視平面図、

## 【符号の説明】

1 生理用ナプキン

2 裏面シート

\* 3 主吸収体

3a 圧縮部

4 表面シート

5 シート

6 防漏側壁

7 弾性部材

8 後部フラップ

9 ウイング

11 副吸収体

15 折り癖部

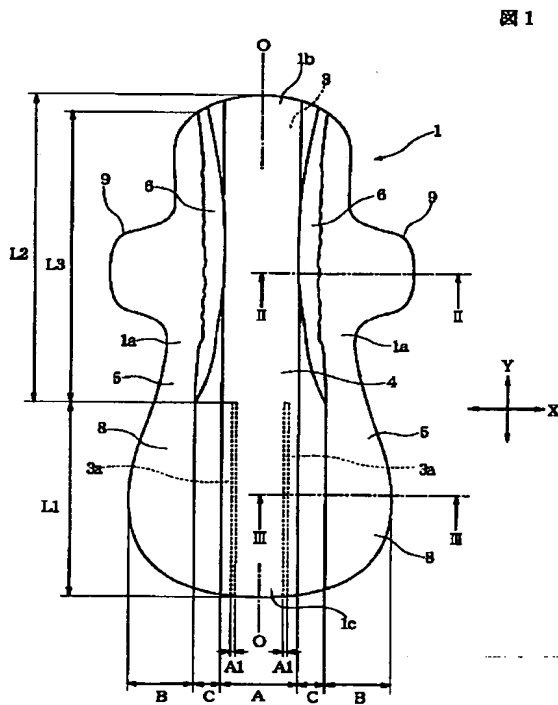
A 主吸収領域

A1 高剛性部

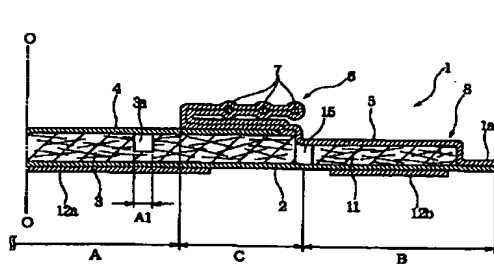
B 側部領域

C 境界領域

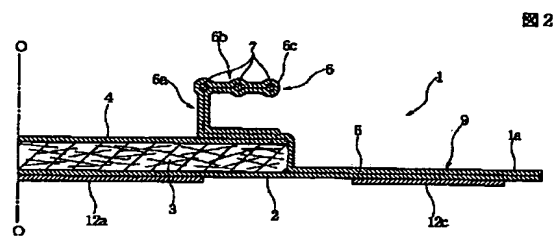
【図1】



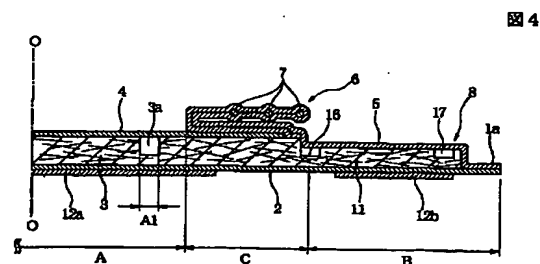
【図3】



【図2】



【図4】

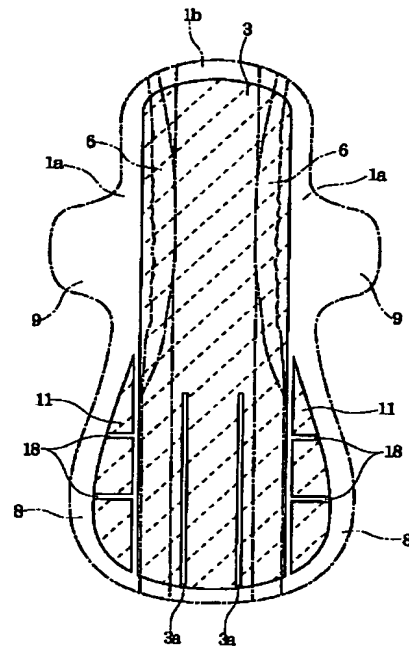
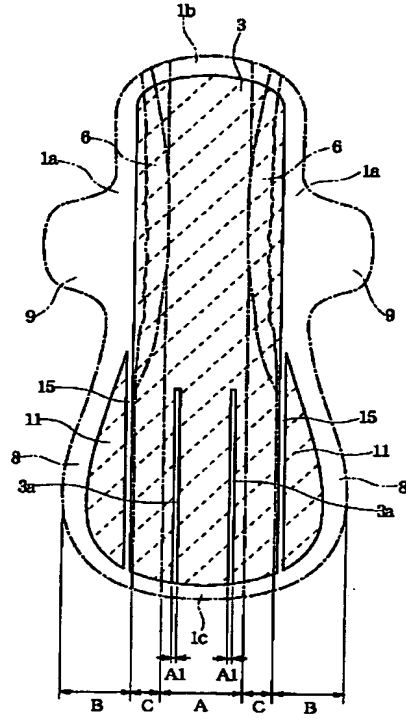


【図5】

【図6】

図5

図6



フロントページの続き

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F ターム (参考) 4C003 AA03 BA01 CA01 DA01 DA06  
EA03 HA05

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**(21)Application number : 2001-346888****(71)Applicant : UNI CHARM CORP****(22)Date of filing : 13.11.2001****(72)Inventor : MIZUTANI SATOSHI  
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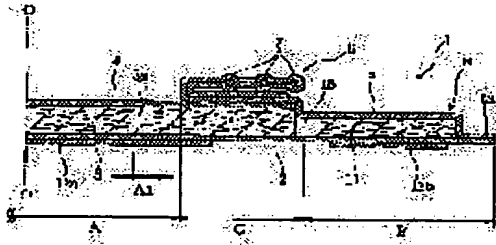
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**(30)Priority****Priority number : 2000354201    Priority date : 21.11.2000    Priority country : JP**

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**(54) SANITARY NAPKIN**



**(57)Abstract:**

**PROBLEM TO BE SOLVED:** To solve a problem such that a decrease in capacity to absorb a liquid and an uncomfortable foreign-body sensation felt by a wearer are brought about because an end of a flap part in a rear part of a sanitary napkin tends to get caught in a state of being folded for overlapping between a body and a central absorbent body when the wearer tosses about in sleep or does other things.

**SOLUTION:** In regard to an area including a highly rigid part A1 of a main absorption area A, a side area B and a boundary area C, where a leakage preventing side wall 6 is superposed, in the rear part of the sanitary napkin, the absorption area A is made higher in bending resistance than the boundary area C, which is made higher in bending resistance than the side area B. Accordingly, the absorption area A is hard to kink, and the presence of the boundary area C makes it hard for the side area B formed with a flap to be deformed in such a manner as to overlap with the absorption area A.

**LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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## CLAIMS

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### [Claim(s)]

[Claim 1] The main absorption field which extends in a lengthwise direction, and the flank field located in the both-sides section of said main absorption field, The leakproof side attachment wall prolonged in a lengthwise direction in the border area between said main absorption fields and said flank fields is established. In said main absorption field In the sanitary napkin with which the main absorber prolonged in a lengthwise direction is formed between the rear-face sheet of liquid impermeability, and the surface sheet of liquid permeability in the back section of a lengthwise direction The high rigidity section is formed in said a part of main absorption field [ at least ]. In said back section The posterior part flap to which said flank field swelled to right-and-left both sides is formed, and the subabsorber intervenes with this posterior part flap between said rear-face sheets and sheets located in a front-face side. In said back section The sanitary napkin with which bending resistance of a lengthwise direction in each 10mm width of face of the field in which said high rigidity section of the main absorption field was formed, said border area, and said posterior part flap is characterized by being a main absorption field > border area > posterior part flap.

[Claim 2] The sanitary napkin according to claim 1 whose bending resistance of 3.94 - 8.8mN and a posterior part flap the bending resistance of 9.8 - 29.4mN and a border area is 0.49-3.43mN for the bending resistance of said main absorption field.

[Claim 3] The sanitary napkin according to claim 1 or 2 with which said some of main absorbers [ at least ] are compressed, and said high rigidity section is formed in said back section.

[Claim 4] It is the sanitary napkin according to claim 3 which is what said main absorber is compressed partly, and said high rigidity section prolonged in a line is formed in the lengthwise direction in said back section, and is measured in a field with a width of face [ containing said high rigidity section to which said bending resistance extends in said lengthwise direction ] of 10mm.

[Claim 5] Said leakproof side attachment wall is a sanitary napkin according to claim 1 to 4 which is folded up in said back section, starts from a liquid receiving side in the front rather than said back section, and is made possible.

[Claim 6] The sanitary napkin according to claim 1 to 5 with which the chip box peculiarity section is prepared in the boundary section of said border area and said posterior part flap.

[Claim 7] The sanitary napkin according to claim 6 with which said main absorber and said subabsorber are separated in said chip box peculiarity section.

[Claim 8] The sanitary napkin according to claim 1 to 7 with which said subabsorber is divided into plurality.

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[Translation done.]

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## DETAILED DESCRIPTION

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### [Detailed Description of the Invention]

[0001]

[Field of the Invention] Especially this invention relates to the sanitary napkin which raised the fit nature to the liquid spill in the back section, and the body of the back section with respect to a sanitary napkin.

[0002]

[Description of the Prior Art] For example, while the flap section of the configuration where the sanitary napkin indicated by JP,2000-189459, A swelled to the side in the both-sides section of an absorptivity body at the posterior part of a lengthwise direction is prepared and the absorber is formed in the crosswise center section, the absorber other than said absorber is formed in said flap section. In this sanitary napkin, the menstrual blood which oozed out to the back section of an absorptivity body, especially the bottom part of the body can be absorbed in said flap section, consequently the horizontal leakage of the liquid in the back section can be prevented now.

[0003]

[Problem(s) to be Solved by the Invention] However, the sanitary napkin indicated by the above-mentioned official report Since it is the structure which is easy to transform the boundary section of the absorber of a central part, and the absorber formed in the flap section easily in the back section, When it is twisted in the back section of a sanitary napkin and the force etc. acts by changing sides under sleeping etc. especially during wear, there is a possibility of deforming so that may be easy to transform the absorber of a central part first, and the flap section may slide to a central site further, or it may break into a central site and the flap section may lap with a central part on the contrary.

[0004] When said flap section laps with the liquid receiving side of a central part, absorption of the menstrual blood in the back section will be checked, it will become easy to produce horizontal leakage, the feeling of a fit of a sanitary napkin will be lost further, and sense of incongruity will be given to a wearer's bottom part.

[0005] It prevents that this invention is for solving the above-mentioned conventional technical problem, and the flap section of the back especially under sleeping deforms it into a center-section side during wear, and a feeling of a fit is not spoiled, but it aims at offering the sanitary napkin which can prevent the horizontal leakage by the back section effectively.

[0006]

[Means for Solving the Problem] The main absorption field where this invention is prolonged in a lengthwise direction, and the flank field located in the both-sides section of said main absorption field, The leakproof side attachment wall prolonged in a lengthwise direction in the border area between said main absorption fields and said flank fields is established. In said main absorption field In the sanitary napkin with which the main absorber prolonged in a lengthwise direction is formed between the rear-face sheet of liquid impermeability, and the surface sheet of liquid permeability in the back section of a lengthwise direction The high rigidity section is formed in said a part of main absorption field [ at least ]. In said back section The posterior part flap to which said flank field swelled to right-and-left both sides is formed, and the subabsorber intervenes with this

posterior part flap between said rear-face sheets and sheets located in a front-face side. In said back section Bending resistance of a lengthwise direction in each 10mm width of face of the field in which said high rigidity section of the main absorption field was formed, said border area, and said posterior part flap is characterized by being a main absorption field > border area > posterior part flap.

[0007] For example, for the bending resistance of said main absorption field, the bending resistance of 9.8 - 29.4mN and a border area is [ the bending resistance of 3.94 - 8.8mN and a posterior part flap ] 0.49-3.43mN. That is, the ratio of bending resistance of the main absorption field, a border area, and a posterior part flap can express as 9.8-29.4:3.94-8.8:0.49-3.43.

[0008] Moreover, for example, in said back section, said some of main absorbers [ at least ] are compressed, said high rigidity section is formed, in said back section, said main absorber is compressed partly, said high rigidity section prolonged in a line is formed in the lengthwise direction, and said bending resistance is measured in a field with a width of face [ containing said high rigidity section prolonged in said lengthwise direction ] of 10mm. after [ or ] said main absorber was formed thickly beforehand -- the main absorber of the main absorber with which the whole region is mostly compressed and the main absorber in the back section is ahead located rather than it -- bending resistance -- high -- becoming -- the main absorption field of the back section -- the whole region may be mostly made into said high rigidity section.

[0009] Moreover, said leakproof side attachment wall is folded up in said back section, in the front, it starts from a liquid receiving side rather than said back section, it is supposed that it is possible, and the bending resistance of the part of 10mm width of face of the part by which the leakproof side attachment wall was folded up, or 10mm width of face including the folded-up leakproof side attachment wall is prescribed as mentioned above by the border area of said back section.

[0010] Moreover, it is desirable that the chip box peculiarity section is prepared in the boundary section of said border area and a posterior part flap.

[0011] Furthermore, in said chip box peculiarity section, said main absorber and said subabsorber shall be separated, and said subabsorber may be further divided into plurality.

[0012] In the sanitary napkin of this invention, in the back section in which the posterior part flap was formed, since the high rigidity section is prepared in the main absorption field of a center section, when a sanitary napkin twists and the force acts, it is hard to transform the main absorption field. Moreover, the border area of the main absorption field and a posterior part flap serves as the bulky structure where the leakproof side attachment wall was established, and bending resistance is high rather than the posterior part flap. Therefore, when it twists and the force etc. acts, it is hard coming to generate the deformation which breaks or is slid so that a posterior part flap may lap to the main absorption field. Moreover, a posterior part flap tends to fit a wearing person's bottom part that it is easy to deform.

[0013]

[Embodiment of the Invention] Hereafter, this invention is explained with reference to a drawing.

[0014] The top view in which drawing 1 shows the gestalt of operation of the sanitary napkin of this invention, a half section Fig. [ in / in drawing 2 / the II-II line of drawing 1 ], a half section Fig. [ in / in drawing 3 / the III-III line of drawing 1 ], the half section Fig. where drawing 4 is equivalent to drawing 3 in the gestalt of other operations, the fluoroscopy top view showing the configurations of the main absorber [ in / in drawing 5 / gestalt of operation of drawing 1 ] and a subabsorber, and drawing 6 are the fluoroscopy top views equivalent to drawing 5 which shows the gestalt of other operations. In addition, said drawing 2 , drawing 3 , and drawing 4 are the sectional views of the single-sided one half of center line O-O prolonged in a lengthwise direction, and the one half of another side is said each drawing and symmetrical structure.

[0015] The sanitary napkin 1 shown in drawing 1 thru/or drawing 3 is a bilateral symmetry configuration through center line O-O prolonged in a lengthwise direction (the direction of Y). The boundary parts of the flank fields B and B, and said main absorption field A and said flank fields B and B of the main absorption field A and the right-and-left both-sides section of the predetermined width of face to which a crosswise central part extends in a lengthwise direction are border areas C and C. And the parts to which the bending resistance of said main absorption fields A is raised are the high rigidity sections A1 and A1.

[0016] Moreover, in a lengthwise direction, the range of the predetermined die length L1 (die-length range in which the posterior part flap explained later and said high rigidity section A1 are formed) is [ the front remaining part (die length L2) ] the front section from the back section and said back section L1. In the front section of said die length L2, it is the leakproof field which the leakproof side attachment wall which the range of the die length of L3 explains later started, and was made possible. in addition -- up to [ as said leakproof field (part of L3) is said back section (part of L1) ] -- extending -- or the back section (part of L1) -- you may extend until it crosses to an overall length mostly.

[0017] As shown in drawing 2 and drawing 3, the rear-face sheet 2 which consists of a liquid impermeable sheet throughout the rear face of a sanitary napkin is formed. The main absorber 3 is formed on said rear-face sheet 2. the width-of-face dimension with which said main absorber 3 doubled said main absorption field A and border areas C and C of the both-sides section as shown in drawing 5 -- about 1 -- I do -- \*\*\*\* -- and a lengthwise direction -- it is mostly crossed and prepared in the whole region.

[0018] In the front-face side which becomes a liquid receiving side, said main absorber 3 is formed in the surface sheet 4 of wrap liquid permeability. This surface sheet 4 has the width-of-face dimension mostly in agreement in the width-of-face dimension which doubled said main absorption field A and border areas C and C of that both-sides section, and is prepared over the overall length of a lengthwise direction.

[0019] In said flank field B, the liquid impermeable or hydrophobic sheet 5 is formed in the front face by the side of liquid receiving. This sheet 5 is folded up by the two-sheet pile in said border areas C and C of the right-and-left both-sides section of said main absorber 3, and the leakproof side attachment walls 6 and 6 are formed. by said leakproof side attachment walls 6 and 6, two or more elastic members (drawing 3) 7 are pinched by the interior of folding of said sheet 5, and it pastes up -- having -- \*\*\*\* -- this elastic member 7 -- said leakproof side attachment walls 6 and 6 -- setting -- a lengthwise direction -- it is mostly prepared in the overall length.

[0020] As shown in drawing 3, in said back section (part of L1) Paste the front face of the surface sheet 4, or heat welding of said leakproof side attachment walls 6 and 6 is carried out in the condition of having been folded up in the shape of flatness, and similarly rather than said leakproof field (part of L3) in the front section (part of L2) in a front part Said leakproof side attachment walls 6 and 6 are folded up similarly, and paste the front face of the surface sheet 4, or heat welding is carried out. Moreover, in said leakproof field (part of L3), said leakproof side attachment walls 6 and 6 are in a free condition.

[0021] By the elastic recoil of said elastic member 7, the sanitary napkin 1 in the free condition that external force is not given curves so that a liquid receiving side may become a concave, consequently in said leakproof field (part of L3), as the leakproof side attachment walls 6 and 6 show drawing 2, it starts. And in the leakproof field (part of L3), skin contact section 6b and \*\* which were transformed so that free-end (clinch edge) 6c might be outside suitable from the upper part of side-attachment-wall section 6a from which the leakproof side attachment walls 6 and 6 start to a liquid receiving side, and said side-attachment-wall section 6a are formed.

[0022] As shown in drawing 2 , said rear-face sheet 2 and said sheet 5 are joined at right-and-left both the edges 1a and 1a of a sanitary napkin 1. Moreover, in first transition section 1b of the lengthwise direction shown in drawing 1 and drawing 5 , said rear-face sheet 2 and said surface sheet 4 are joined, and said rear-face sheet 2 and said surface sheet 4 are joined also for trailing-edge section 1c. Said junction is performed by the adhesion by hot melt adhesive, or heat welding (heat seal).

[0023] As shown in drawing 1 and drawing 5 , in the back section (part of L1) of a sanitary napkin 1, the posterior part flaps 8 and 8 from which said flank fields B and B became the configuration on which it spreads on right-and-left both sides compared with a front part rather than it, and the edge draws a curve are formed. Moreover, in said front section (part of L2), said flank fields B and B project to the right-and-left both-sides section, and wings 9 and 9 are formed. This sanitary napkin 1 is used for it by the background, being turned up so that said wings 9 and 9 may insert the KUROTCCHI section of underwear. Moreover, said posterior part flaps 8 and 8 are applied by a wearing person's bottom part.

[0024] As shown in drawing 3 and drawing 5 , with said posterior part flaps 8 and 8, the subabsorber 11 is inserted between said rear-face sheets 2 and sheets 5 located in a front-face side. Moreover, as shown in drawing 2 and drawing 5 , by said wings 9 and 9, said rear-face sheet 2 and said sheet 5 are joined.

[0025] In said sanitary napkin 1, the adhesive layer for making it adhere to underwear is prepared in the external surface of the rear-face sheet 2. it is shown in drawing 2 and drawing 3 -- as -- the external surface of said rear-face sheet 2 -- the main absorption field A -- adhesive layer 12a is mostly prepared in a rear-face side, adhesive layers 12b and 12b are formed in said posterior part flaps 8 and 8, and adhesive layers 12c and 12c are prepared for said wings 9 and 9.

[0026] In case it equips with this sanitary napkin 1, said adhesive layer 12a adheres to the KUROTCCHI section of underwear, and said adhesive layers 12b and 12b are made to adhere to the hips reliance section side of underwear. And said wings 9 and 9 are turned up so that the both-sides section of the KUROTCCHI section of underwear may be involved in, and adhesive layers 12c and 12c adhere to the external surface of the KUROTCCHI section of underwear.

[0027] Said main absorber 3 is formed with the hydrophilic ingredient or mixture of air RAID pulp, tissue paper, a polymer sheet, curdy pulp, or natural cellulose fiber, such as laminated material, and the dimension of the cross direction is about 50-100mm. For example, the laminating of the curdy pulp is carried out in the range of a basis weight 200 - 500 g/m<sup>2</sup>, and after covering with tissue paper, press forming is carried out so that a consistency may serve as 50 - 120 mg/cm<sup>3</sup>. Moreover, 5-40 mass % mixing of a macromolecule absorber (SAP) is done at said fiber laminated material, and you may enable it to prevent a flow of the liquid within the main absorber 3 with the absorptive power of said macromolecule absorber.

[0028] As shown in drawing 1 and drawing 5 , in said main absorber 3, in the field in which the back section 8 and L1 8, i.e., posterior part flaps, is formed, the compression zones (or squeezing section) 3a and 3a prolonged in a line are formed in a lengthwise direction, and the part and its perimeter part of these compression zones 3a and 3a serve as the high rigidity sections A1 and A1. On both sides of said center line O-O, every (or two or more are good at a time) one of these linear compression zones 3a and 3a is formed in the bilateral symmetry location, and both the compression zones 3a and 3a are mutually parallel.

[0029] Compression zone 3a is prepared in the main absorption field A, and the width-of-face dimension of compression zone 3a is 2-5mm. In addition, the width-of-face dimension of said main absorption field A is 20-60mm.

[0030] Said subabsorber 11 is formed with the same ingredient as said main absorber 3. In this case,

although the superintendent officer of the main absorber 3 may be the same as the superintendent officer of the subabsorber 11, it is desirable that the superintendent officer of the subabsorber 11 is smaller than the superintendent officer of the main absorber 3. For example, both the main absorber 3 and the subabsorber 11 are formed with the fiber laminated material of a hydrophilic property, the main absorber 3 and the subabsorber 11 dissociate on the boundary line of said border area C and flank field B, and both the absorbers 3 and 11 are wrapped in the same facial tissue. Consequently, on the boundary line of a border area C and the flank field B, the chip box peculiarity sections 15 and 15 in which the absorber does not exist are formed.

[0031] Moreover, it is the quality of the material in which the subabsorber 11 differs from the main absorber 3, for example, the subabsorber 11 may be formed with the nonwoven fabric which is rich in the cushioning properties formed by the through air method, a hydrophilic form resin sheet, the foam sheet by which hydrophilic processing was carried out.

[0032] Said surface sheet 4 is formed with the nonwoven fabric of hydrophobic fiber, the nonwoven fabric formed for hydrophobic fiber and hydrophilic fiber, the puncturing nonwoven fabric formed for hydrophobic fiber, the puncturing film, etc. Moreover, in order that said surface sheet 4 may raise the fit nature to the body, it may be fabricated by bulky and the bulky dimension in this case has about 1-15mm desirable [ the sheet ].

[0033] Said rear-face sheet 2 is formed with the laminate material of the resin film of permeability, the nonwoven fabric formed for hydrophobic fiber, said nonwoven fabric, and a film etc.

[0034] The nonwoven fabric which consisted of hydrophobic synthetic fibers, a foaming sheet, a puncturing film, a puncturing nonwoven fabric, etc. can be used for the sheet 5 which forms the leakproof side attachment walls 6 and 6. Moreover, hydrophilic fiber mixture, such as a nonwoven fabric which performed and sheet-ized hydrophilic processing to the hydrophobic synthetic fiber as other ingredients, a hydrophobic synthetic fiber, and viscose rayon, acetate rayon, natural cellulose fiber, is mentioned. Or absorptivity ingredients, such as an SAP sheet which covered the high-polymer absorbent with facial tissue inside the leakproof side attachment walls 6 and 6 constituted from said ingredient, air RAID pulp, a hydrophilic melt BURON nonwoven fabric, a pulp sheet, and a rayon span ball-race nonwoven fabric, are arranged, and it is made to carry out absorption maintenance of the liquid in contact with the leakproof side attachment walls 6 and 6.

[0035] Said elastic member 7 has that desirable by which adhesion immobilization was carried out at the leakproof side attachment walls 6 and 6 where the force of 0.49-1.47N within the limits is given in the condition of could choose from tabular and \*\*\*\*\* which used as the principal component the shape of the shape of a film which used thermoplastic synthetic rubber as the principal component, and yarn, a network-like object, or natural rubber, and having extended within the limits of 1.1 to 2.0 times from natural length.

[0036] In addition, the height of side-attachment-wall section 6a is [ the width-of-face dimension of 5-50mm and skin reliance section 6b of the standup dimension of the leakproof side attachment walls 6 and 6 ] 5-30mm.

[0037] As shown in drawing 3 , in the back section (part of L1) in which the posterior part flaps 8 and 8 were formed, the laminating of the leakproof side attachment wall 6 is folded up and carried out in the border area C (in addition, as the leakproof side attachment wall 6 shows a part of back section [ at least ] (part of L1) to drawing 2 , you may start). Therefore, in said border area C, the cross-section configuration serves as bulky.

[0038] and -- said -- back -- the section (part of L1) -- \*\*\*\* -- main -- absorption -- a field -- A -- high -- rigidity -- the section -- A -- one -- namely, -- a compression zone -- three -- a -- preparing -- having -- \*\*\*\* -- a field -- a posterior part -- a flap -- eight -- forming -- having had -- a flank -- a field -- B -- leakproof -- a side attachment wall -- six -- preparing -- having had -- a border area -- C

-- bending resistance -- different -- \*\*\*\* -- bending resistance -- high -- rigidity -- the section -- A -- one -- preparing -- having had -- a field -- > -- a border area -- C -- > -- a posterior part -- a flap -- eight -- becoming -- \*\*\*\* -- .

[0039] Here, said bending resistance measures the sample cut so that a lateral (the direction of X) width-of-face dimension might be prolonged in a lengthwise direction in 10mm, and is the sample (when actual formation of much compression zone 3a is carried out, it is also possible that two or more compression zone 3a exists in 10mm width of face) of 10mm width of face which contains compression zone 3a in said main absorption field A, and the sample of 10mm width of face which includes said leakproof side attachment wall 6 in said border area C.

[0040] Whenever Gurley flexible, a testing machine (made in the Yasuda [, Inc. ] energy machine factory: part number 311) is used for said bending resistance for said sample, and it is JIS. L 1096 8.20.1 (1999) It measures based on A law (Gurley method). This bending resistance has the desirable range of 0.49-3.43mN in the flank field B in which 3.94 - 8.8mN and a posterior part flap were formed in 9.8 - 29.4mN and a border area C in the main absorption field A in which the high rigidity section A1 is formed.

[0041] In the back section (part of L1), the posterior part flaps 8 and 8 of the configuration which swells to the method of both sides are formed, this part is put in this sanitary napkin by a wearing person's bottom part, and it enables it to prevent the horizontal leakage of the menstrual blood from a bottom part in the time of sleeping etc.

[0042] In said back section (part of L1), since the high rigidity section A1 is formed in the main absorption field A, the main absorption field A can break, or it is rare to be twisted and the main absorption field A can prevent [ \*\*\*\* / separating from the skin ] shifting.

[0043] Although it has the leakproof side attachment wall 6, it becomes bulky and the border area C where bending resistance is higher than the posterior part flap 8 is moreover located in the side of said main absorption field A, since this border area C is bulky, the cushioning properties to the skin are high and its hit by the skin is soft. And since the border area C has moderate bending resistance, it is rare [ it ] a twist or to be slid or inserted in so that it may lap with the main absorption field A.

[0044] Moreover, since the subabsorber 11 is located in the posterior part flaps 8 and 8, the menstrual blood which flowed to the posterior part flap 8 can be absorbed, and the horizontal leakage of a sanitary napkin 1 can be prevented effectively. Furthermore, since it follows and fits the form of a bottom part since the posterior part flap 8 has low bending resistance, and it has the chip box peculiarity section 15, it follows the curve to the side of a bottom part, and tends to fit.

[0045] Since the border area C as mentioned above where bending resistance is higher than the posterior part flap 8 exists between the posterior part flaps 8 and the main absorption fields A where bending resistance is comparatively low, even if the posterior part flap 8 is twisted in it or it deforms into it, it is hard coming to deform into the condition of lapping with the main absorption field A. Therefore, it is rare for the posterior part flap 8 and the main absorption field A to lap neither by a crease nor twist, and for the absorptance of the main absorption field A to decline, or to produce the sense of incongruity to the skin.

[0046] In the back section (part of L1), the main absorber 3 and the subabsorber 11 are connected, and an absorber is compressed in the boundary section of said main absorber 3 and subabsorber 11 on the boundary line of a border area C and the posterior part flap 8, or thickness is decreased, it breaks by the gestalt of other operations shown in drawing 4 , and the peculiarity section 16 is formed with it. The compression zone 17 is formed in the edge of the subabsorber 11 so that the periphery edge of the posterior part flap 8 may furthermore be met.

[0047] When menstrual blood results in the posterior part flap 8, it is absorbed by the subabsorber 11 and the menstrual blood moves the inside of the subabsorber 11, or a front face to the side, it is



drawn by menstrual blood to said compression zone 17 to which the consistency is high, and is held by the compression zone 17. Therefore, menstrual blood stops further easily being able to leak from the posterior part flap 8 to the side.

[0048] Next, the subabsorber 11 formed in said posterior part flaps 8 and 8 is separated by the separation line, or it is compressed, and breaks by the gestalt of other operations to the pan shown in drawing 6 , and the peculiarity section 18 is formed with it. The subabsorber 11 is divided into the lengthwise direction by this chip box peculiarity section 18. With the gestalt of this operation, it becomes easy to curve towards a lengthwise direction, and the subabsorber 11 follows the configuration of a wearing person's bottom part further, and it becomes easy to transform it into it.

[0049] in addition, the whole region of the main absorber 3 is made to compress in the main absorption field A in the back section (part of L1), so that bending resistance becomes high rather than the front section (part of L2) etc. -- carrying out -- the main absorption field A -- the whole region may serve as the high rigidity section A1 mostly.

[0050]

[Effect of the Invention] According to this invention explained in full detail above, during wear of a sanitary napkin, the contamination of the posterior part flap especially under sleeping can be prevented, the absorption function of the main absorption field is not spoiled, or a feeling of a fit is not spoiled. Moreover, since a posterior part flap has a liquid absorption function, the horizontal leakage of liquid can be prevented effectively.

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[Translation done.]

**\* NOTICES \***

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**DESCRIPTION OF DRAWINGS**

[Brief Description of the Drawings]

[Drawing 1] The top view showing the gestalt of operation of the sanitary napkin of this invention,

[Drawing 2] The half section Fig. in the II-II line of drawing 1 ,

[Drawing 3] The half section Fig. in the III-III line of drawing 1 ,

[Drawing 4] The half section Fig. equivalent to drawing 3 which shows the sanitary napkin of the gestalt of other operations of this invention,

[Drawing 5] The fluoroscopy top view showing the configuration of the main absorber of the sanitary napkin shown in drawing 1 , and a subabsorber,

[Drawing 6] The fluoroscopy top view equivalent to drawing 5 which shows the sanitary napkin of the gestalt of other operations of this invention,

[Description of Notations]

- 1 Sanitary Napkin
- 2 Rear-Face Sheet
- 3 The Main Absorber
- 3a Compression zone
- 4 Surface Sheet
- 5 Sheet
- 6 Leakproof Side Attachment Wall
- 7 Elastic Member
- 8 Posterior Part Flap
- 9 Wing
- 11 SubAbsorber
- 15 Chip Box Peculiarity Section
- A The main absorption field
- A1 Quantity rigidity section
- B Flank field
- C Border area

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[Translation done.]

**\* NOTICES \***

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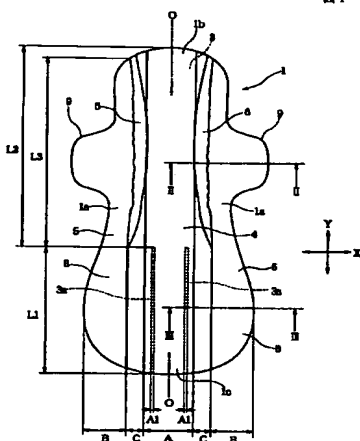
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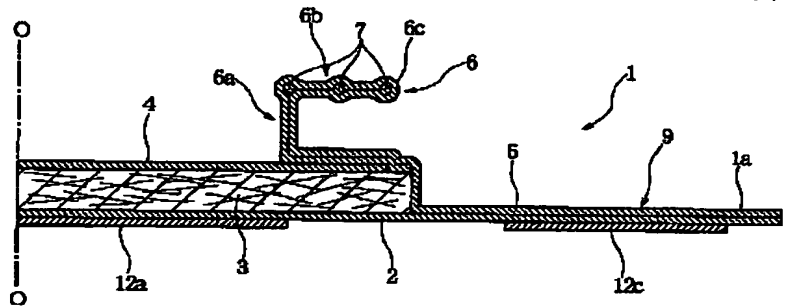
**DRAWINGS**

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[Drawing 1]

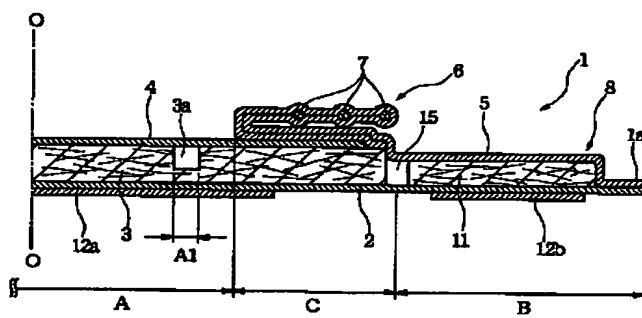


[Drawing 2]



**圖 2**

[Drawing 3]



**图 3**

[Drawing 4]

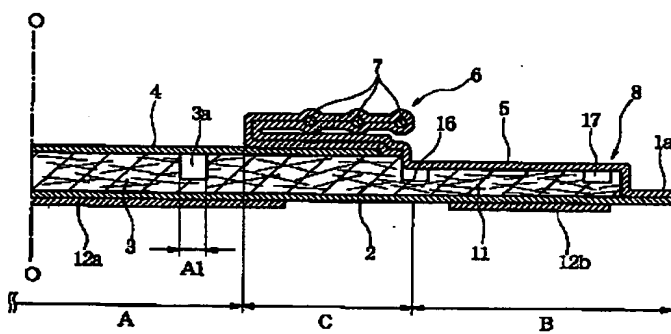


圖 4

[Drawing 5]


 5

[Drawing 6]


 6

[Translation done.]